



NORTH CAROLINA

Outdoor Recreation Plan

2015-2020



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OUTDOOR RECREATION PLAN

2015 - 2020



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Division of Parks and Recreation

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INTRODUCTION

North Carolina has been blessed with a rich and varied tapestry of lands and waters. The landscape stretches from the Tidewater's ocean beaches, sounds and marshes westward through flat Coastal Plain swamp forests to the rolling Piedmont and on to ancient and hauntingly beautiful mountains, well-known and loved not just by North Carolinians, but by millions of Americans nationwide. Traversing and connecting this landscape are beautiful rivers and streams. These lands and waters provide not only breathtaking scenery and magnificent settings for outdoor recreation, but also serve to support a rich diversity of plant and animal life. North Carolina is indeed "Naturally Wonderful".

EXECUTIVE SUMMARY

Since passage of the federal Land and Water Conservation Fund (LWCF) Act of 1965, preparation of a Statewide Comprehensive Outdoor Recreation Plan (SCORP) has been required in order for states to be eligible for LWCF acquisition and development assistance. Past SCORPs and this edition have provided a coordinated framework addressing the problems, needs, and opportunities related to the need for improved public outdoor recreation. The N.C. Division of Parks and Recreation, the state agency with authority to represent and act for the state for purposes of the LWCF Act, prepared this plan. LWCF funds have provided \$4.2 million for projects in North Carolina during the past five years, an average of \$850,000 annually. Since 1965, more than \$80 million of LWCF assistance has been provided for more than 900 projects.

The plan contents and format are shaped by the planning guidelines of the LWCF Act. The major requirements are comprehensiveness; an evaluation of the demand for and supply of outdoor recreation resources and facilities in the state; a wetlands priority component; a program for implementation of the plan; ample public participation in the planning process; and a description of process and methodology. The plan has been prepared to both meet requirements for continuing LWCF eligibility and meet the need for meaningful evaluation of state and local government public outdoor recreation projects.

Chapter 1 presents the setting for outdoor recreation in the state. Chapter 2 contains an estimate of the demand for outdoor recreation using data about recreation participation in North Carolina based on survey responses from over 17,000 state residents. In 2014, the Division of Parks and Recreation conducted an on-line survey and analyzed the responses received. The questionnaire asked North Carolinians about their preferences for outdoor recreation activities as well as their priorities for parks and recreation in the future.

Chapter 3 reports the results of an inventory of public outdoor recreation areas and facilities in North Carolina and makes comparisons county by county and statewide. Information was provided by local recreation agencies, state and federal agencies and geographic information databases. LWCF assistance will be awarded to counties showing higher relative needs using the state's Open Project Selection Process. Chapter 4 describes the roles and responsibilities of federal, state, local, private, and commercial outdoor recreation providers in the state. Chapter 5 presents information about the trails and greenways in the state which support some of the most popular recreational activities – walking

and hiking.

Chapter 6 presents the issues, goals and objectives identified for the next five years. The issues were developed following a review of the results of the citizen survey, a survey of recreation providers across the state and a review of the factors influencing the availability of outdoor recreation resources in North Carolina. In addition, these goals and objectives mirror many of the national goals established in the America's Great Outdoors, a 2011 initiative to develop a 21st Century conservation and recreation agenda. Chapter 6 also describes actions the state will be undertaking over the next five years to address the issues and needs identified in this plan.

While the level of LWCF apportionments recently available to North Carolina has lessened the LWCF program's impact, LWCF funds still serve to address issues of statewide importance and to help improve outdoor recreation in North Carolina.

Public involvement in the form of a public survey and meetings with stakeholders went into development of this plan. A final draft plan was also made available via the internet for public review and comment.

Key findings

Goal Statement: To meet the outdoor recreation needs of a growing population, to manage and protect North Carolina's natural resources for current and future citizens, and to achieve the related health and economic benefits for local communities and the state.

Outdoor recreation is important to the lives and livelihoods of nearly all North Carolinians in one way or another. Nearly every respondent to the survey conducted as a part of the North Carolina Outdoor Recreation Plan are participating in an outdoor activity. The most popular activities in North Carolina are visiting a beach or lake, walking for pleasure, visiting parks and historic sites, hiking on trails, freshwater fishing, viewing scenery, fishing from a boat, nature viewing, swimming. In addition, at least ten percent of residents participate in activities such as canoeing, picnicking, bird watching, bicycling, and tennis.

The 2012 Outdoor Industry Association Report notes that in North Carolina outdoor recreation generates \$19.2 billion in consumer spending annually, \$1.3 billion in state and local tax revenue, 192,000 North Carolina jobs, and \$5.6 billion in wages and salaries.

Supply of Park Acreage and Recreation Facilities

An inventory of federal, state and local park lands in North Carolina identified more than 3.5 million acres of land and water available for outdoor recreation. Local governments provide over 100,000 acres for close-to-home recreation such as walking, bicycling, team sports, picnicking and swimming. State parks, gamelands and historic sites offer more than 750,000 acres for activities that fit their missions such as hiking, camping, hunting and visiting significant natural and historic areas. Federal parks, forests, and refuges account for nearly 2.7 million acres and encompass the most popular national parks in the United States, the Great Smoky Mountains and Blue Ridge Parkway.

State parks have added more than 50,000 acres of park land in the past ten years as well as numerous visitor centers, trails and other improvements to better serve the public. Counties and municipalities continue to add more opportunities for their residents. In 2014, six cities had successful park and recreation bonds worth more than \$150 million. All were approved by more than sixty percent of the voters.

Demand

The state's population has been rapidly growing in the past 25 years, among the fastest in the country. By 2015, North Carolina is projected to have more than 10 million residents, a fifty percent increase from 1990. More park land and opportunities are needed to keep pace.

Future park areas that are identified as most needed by recreation professionals are linear parks, nature parks, trail linkages to other jurisdictions, cultural / historic parks, and community parks. Unpaved trails, picnic shelters, wildlife / nature observation sites, and paved trails are among the top priorities for recreational facilities.

Issues and Objectives

Based on a review of the public survey, input from recreation providers and a review of current trends the following priority issues and objectives that are affecting outdoor recreation were identified.

Issue	Objective
Growing Population	Meet the needs of North Carolina's rapidly growing population by maintaining and enhancing its outdoor recreation resources
Public Health	Support improvements in public health and fitness by increasing opportunities for physical activity
Access and Cooperation	Improve the visibility of and public access to public recreation areas and foster cooperation between public recreation managers
Outdoor Recreation and the Economy	Promote the economic advantages of the state's recreation opportunities for communities across North Carolina
Conservation	Protect and conserve North Carolina's high quality natural resources and landscapes
Public Awareness	Increase public awareness of the state's natural resources and outdoor recreation opportunities through education and outreach

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Chapter 1

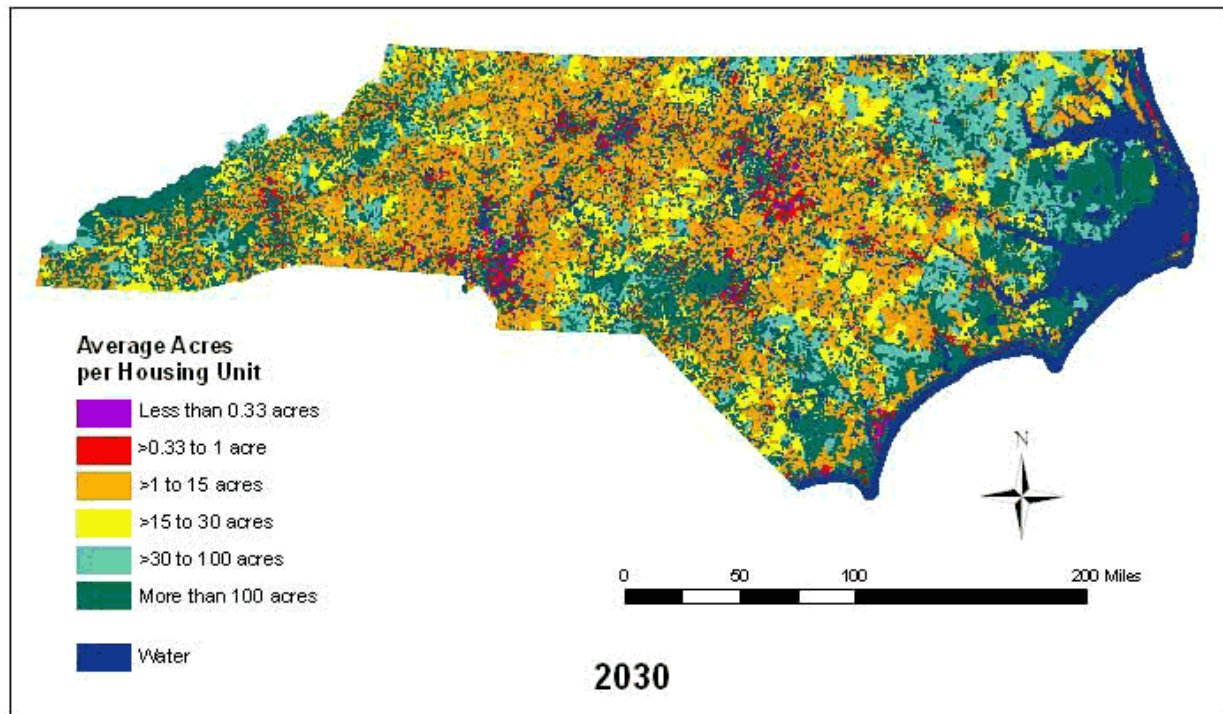
North Carolina's Outdoor Recreation Setting

This chapter will provide a glimpse of several important factors that inherently affect the outdoor recreation setting in North Carolina.

POPULATION AND GROWTH

North Carolina has been, and continues to be, one of the fastest growing states in terms of population in the United States. Between 1990 and 2010, some 2.9 million new residents came to call North Carolina home, which constituted a 44% growth spurt in that twenty year span, bringing North Carolina's population to 9.5 million. According to the U.S. Census Bureau, North Carolina's population grew at an annual rate of 1.7% between 2000 and 2010, far exceeding the nation's average growth rate of 1%. The Census Bureau also reported that one third of the state's growth between 2000 and 2010 occurred in just two counties – Mecklenburg and Wake – while 75% occurred in the 20 largest counties (includes Wake and Mecklenburg).

Projected Housing Density



Furthermore, migration accounted for 80% of North Carolina's growth during this time and the U.S. Census Bureau estimates that between 2010 and 2015, the number of people born outside of North Carolina could surpass the number of native North Carolinians living in the state. Although

only the 28th largest state in terms of size, it is the 14th fastest growing state since 2010. In addition, North Carolina is currently the 10th most populous state and is projected to move into the 7th spot by the year 2030.

The North Carolina population is aging as “Baby Boomers” retire, birth rates have slowed and average life expectancy increases. The median age in the state rose from 26.5 in 1970 to 36.2 in 2000. In 2010, the median age was 38.5 years old. The average life expectancy for a person born in 2010 is nearly 79 years old, an increase of about three years in the past two decades.



The 2010 Census in North Carolina reported a 25% rise in the Hispanic/Latino population since 1990. This segment of the population makes up for 8.4% of the state’s total population and it is the 11th largest Hispanic/Latino population in the United States. Furthermore, North Carolina has the 6th fastest growing Hispanic/Latino population in the country.

In 2012, the median household income in North Carolina was \$45,150, down 3.4% from 2009; compared to the national numbers of \$51,171, down 4.4% from 2009. Unemployment in North Carolina peaked in 2009 at 11.26%; fell to 9.6% in 2012 and fell even further to 6.5% in July 2014, compared to 6.2% national average.

Although unemployment is lower today than 5 years ago, median income is also lower. These factors, along with the rapid population growth and increasing diversity, create many challenges, socially and economically. Moreover, these ever-changing circumstances affect the planning and coordination of North Carolina's outdoor recreation programming and overall conservation of the state's natural resources.

With this expansive growth, comes the need for increased development, which reduces the availability of land for recreation. Herein lays the importance of ensuring that open space and land suitable for recreation purposes is sought and acquired at a pace equal to growth and other development. Funding and planning for such, will be a major challenge for North Carolina, but it is a challenge that we must meet head-on to ensure the continued high quality of life environment that North Carolinians have come to love and expect. Growth, in general, contributes to economic vitality and represents a net positive for long-term employment prospects, but growth should not cloud the vision for the need to bolster public lands for recreational and conservation purposes.

Tourism is one of North Carolina's largest industries. In 2013, domestic travelers spent \$20.2 billion across the state, a 4.4% increase from the previous year, and a record high visitor spending figure. Of that \$20.2 billion total, \$1.9 billion was spent on recreation-related travel services. Tourism dollars directly supported 197,690 jobs for North Carolina residents, up 2% from 2012 and also a record high.



The industry contributed \$4.6 billion to the state's payroll in 2013 and traveler spending generated over \$3 billion in tax receipts (federal, state and local combined).

North Carolina ranks sixth in person-trip volume by state behind only California, Florida, Texas, New York, and Pennsylvania. North Carolina's many and wondrous natural resources, vacation spots, outdoor recreation areas, and recreation opportunities have become preferred destinations for both domestic and international travelers, which has had a significant economic impact on state and local economies, offering yet further motivation to increase and protect these precious resources.

GEOGRAPHY

The geography of North Carolina falls naturally into three regions – the Appalachian Mountains (formed mostly by the Blue Ridge and Great Smoky Mountains), the Middle or Piedmont Plateau, and the Eastern or Tidewater section, also known as the Coastal Plain. North Carolina covers 53,821 square miles and is 503 miles long by 150 miles wide. In terms of size, it is the 28th largest state in the U.S.

Appalachian Mountains: North Carolina's mountain ranges are defined by distinct characteristics. The Smoky Mountain chain is more continuous, more elevated, more consistent in its direction and height, and rises very uniformly from 5,000 to 6,621 feet. The Blue Ridge is composed of many fragments scarcely connected into a continuous and regular chain. Its higher summits range from 5,000 to 6,700 feet; its average elevation is from 3,000 to 4,000 feet.



The mountain region includes many of the tallest peaks east of the Rocky Mountains. The tallest of the Appalachian Mountains is Mount Mitchell, which is the tallest point east of the Mississippi River. The mountain region is approximately 180 miles in length and twenty to fifty miles wide. The mountains lie within the Appalachian-Blue Ridge forests eco-region and are heavily forested. They often feature thick underbrush, except a few areas which are devoid of trees and are called balds.

Piedmont: The central region of North Carolina is referred to as the Piedmont plateau. The piedmont is a hilly region and includes the state's largest cities. Elevations in the Piedmont vary from 300 to 1,100 feet above sea level. There are a few isolated mountain ranges sprinkled here, mostly on the western side, but few of them reach over 1,200 feet. The Piedmont lies within the Southeastern mixed forests eco-region. The Fall Line separates the Piedmont from the Coastal Plain section of North Carolina



Figure 1.1. Geographic Regions of North Carolina

Coastal Plain: The Coastal Plain, covering roughly 45% of the state, is the largest geographic region of North Carolina. The Coastal Plain begins along the fall line, a line of hills which stretch from the South Carolina border through Fayetteville, then Raleigh, and finally through Henderson, near the Virginia border. The fall line marks where the Piedmont plateau drops down to the Coastal Plain; it also marks where waterfalls begin to appear on streams and rivers in the state. The hills of the fall line drop 150 to 350 feet in an eastward direction, but it is not particularly noticeable, as the drop is rather gradual occurring over a width of 1 – 3 miles. East of the fall line, the Coastal Plain is relatively flat, with sandy soils ideal for growing tobacco, cotton, soybeans, and melons.

The Coastal Plain section embodies the two largest landlocked sounds in the United States; the Albemarle Sound in the north and the Pamlico Sound in the south. The Pamlico Sound is larger than the state of Connecticut. The easternmost part of the Coastal Plain is home to the Outer Banks, known as the “Graveyard of the Atlantic” due to the vast number of ships that have wrecked along its beaches and shoals due to robust storms and strong tides. There are over 300 miles of shoreline and beautiful beaches along the Atlantic Ocean, stretching north from the Outer Banks, to Sunset Beach, the extreme southernmost point along the North Carolina coast.

Hydrology

North Carolina is a place with rich water resources- from tumbling mountain streams to massive reservoirs in the Piedmont to its sprawling coastal waters. Water sustains the state’s quality of life by interconnecting social, economic, and environmental systems. More than 9 million North Carolina residents depend on water for drinking, irrigation, manufacturing and industrial processes, mining, recreation, and hydropower. Diverse wildlife find food, shelter and breeding grounds in the state’s plentiful rivers and wetlands. The state has 3,375 miles of tidal shoreline, more than 300 miles of coastline, vast reservoirs, 17 major river basins and a huge network of groundwater.



Water conservation is sometimes overlooked because of North Carolina’s rather ample sources of water. However, times of drought are a reminder of the importance of protecting water quality and quantity.

North Carolina receives an average of 48 inches of rain per year, falling primarily as rain. The Coastal Plain gets about 48 – 60 inches annually; the Piedmont usually sees 40 – 50 inches; and the Mountain regions can receive anywhere from 38 – 90 inches depending on the slopes. Annual winter precipitation ranges from 1 inch at the Outer Banks to 50 inches of snow on some of the higher mountain peaks and upper slopes.

Tropical storms influence North Carolina's weather and water resources an average of twice a year. While they can be quite damaging with high winds and tremendous surges of water, they also can be beneficial. Tropical systems can account for as much as 25% of annual rainfall totals and often can be a source for quenching a prolonged drought. Furthermore, precipitation from tropical storms is a valuable resource for refilling reservoirs and recharging groundwater levels.

Groundwater levels rise and fall during and after rain. Levels are higher in late winter and early spring due to slower rates of evapotranspiration and lower in summer due to higher evapotranspiration. While groundwater is a renewable resource, it is possible to remove it faster than it can be replenished, especially with an ever-increasing population and growth of business, industry, agriculture and development in general. Depletion of groundwater is becoming more and more of a problem in some parts of Eastern North Carolina. Therefore conservation is becoming increasingly important and must be aggressively addressed.



In North Carolina, all municipalities and large private utilities are required to have a Water Shortage Response Plan in place. Among other things, the plan establishes different stages of water shortage severity and it must outline appropriate responses for each stage so that essential needs are met, including drinking water supply, water quality, aquatic habitat, and power generation.

In addition, the North Carolina Division of Water Resources has implemented a river basin water supply planning strategy to ensure that the state has sustainable water resources to meet future needs. Historically, natural wetlands dominated floodplains and river deltas, and most level land in the coastal plain. When colonization began, North Carolina had about 7.2 million acres of wetlands. Since that time, wetlands have been drained for agriculture, forestry, flood control, road construction and urban development. Now about half of the remaining acreage that was once wetlands still exists. According to the most recent figures available, about 5.1 million acres of North Carolina, close to 17 percent of the state, is still wetland. The Coast Plain contains 95 percent of the state's wetlands.



As North Carolina continues to be one of the fastest growing states in the nation, meeting growing water supply needs will require local and state governments, along with consumers working together to coordinate successful monitoring, planning and regulation. Smart decisions today will help ensure plentiful water for tomorrow.

Vegetation and Wildlife

North Carolina has approximately 300 species of trees and almost 3,000 varieties of flowering plants. Along the coast and Coastal Plain region, plant life begins with Sea Oats predominating on the dunes and Salt Meadow and Cordgrass in the marshes. Further inland Wax Myrtle, Yaupon, Red Cedar, and Live Oak are common and plentiful trees. Blackwater swamps support dense stands of Cypress and Gum trees.

Pine Trees are a common sight in the Piedmont area, including the Long Leaf (state tree), Loblolly, Shortleaf, and Virginia Pine. Sweet Gum and Tulip Poplars spring up beneath the tall pines, later giving way to an Oak-Hickory Climax forest. Dogwood (the state flower) decorates the understory. The abundance of plants reaches extraordinary proportions in the Mountain region. The deciduous forests on the lower slopes contain Carolina Hemlock, Silver Bell, Yellow Buckeye, Sugar Maple, Yellow Birch, Tulip Poplar, and Beech. Spruce and Fir dominate the highest mountain peaks. Twenty-seven plant species are listed as endangered.



Pleasure Island – Sea Oats

The White-tailed Deer is the principal big game animal of North Carolina, and the Black Bear is a tourist attraction in the Great Smoky Mountains National Park. The Wild Boar was introduced to the mountains during the 19th century; beavers have been reintroduced and are now the state's principal furbearers. The largest native carnivore is the Bobcat.

North Carolina game birds include the Bobwhite Quail, Mourning Dove, Wild Turkey, and numerous duck and goose varieties. Trout and Smallmouth Bass flourish in the clear mountain streams of North Carolina, while Catfish, Pickerel, Perch, Crappie, and Largemouth Bass thrive in fresh water. The sounds and surf of the coastal area yield Channel Bass, Striped Bass, Flounder and Bluefish to anglers.

The Gray Wolf, Elk, Eastern Cougar, and Bison are extirpated in North Carolina. The American Alligator, which is protected by the state, has returned in large numbers to eastern swamps and lakeshores. Thirty animal species have been listed by the U.S. Fish and Wildlife Service as threatened or endangered including the Bald Eagle, Red-Cockaded Woodpecker, four species of

whale, and five species of sea turtles. This diversity of wildlife and vegetation in the state is considered to be among the greatest in the nation.



North Carolina's State Symbols from Nature

Bird: Cardinal

Fish: Channel Bass

Flower: Dogwood

Tree: Long-leaf Pine

Reptile: Eastern box turtle

Carnivorous Plant: Venus flytrap

Shell: Scotch Bonnet

Wildflower: Carolina Lily